

# **Center for Advanced Infrastructure & Transportation** Rutgers, The State University of New Jersey QUARTERLY PROGRESS REPORT

Project Title: New Jersey State LTAP Technol	New Jersey State LTAP Technology Transfer Center (FHWA) 2009						
RFP NUMBER:	NJDOT RESEARCH PROJECT MANAGER: W. Lad Szalaj						
TASK ORDER NUMBER: TO 230 / Acct 4-30745	PRINCIPAL INVESTIGATOR: Dr. Ali Maher						
Project Starting Date: 01/01/2009 Original Project Ending Date: 12/31/2009	Period Covered: 2 <sup>nd</sup> Quarter 2009						

Task	Task	% of Total	Fix	ed Budget	% of Task	C	ost this	% of Task to	To	tal cost to
#					this quarter	q	uarter	date		date
1	Mobilization		\$	-	0.00%	\$	-	0.00%	\$	-
2	Safety Focus Area	30.50%	\$	73,264	30.00%	\$	21,979	70.00%	\$	51,285
3	Infrastructure Management Focus Area	28.10%	\$	67,289	30.00%	\$	20,187	60.00%	\$	40,373
4	Workforce Development Focus Area	23.00%	\$	55,290	25.00%	\$	13,823	45.00%	\$	24,881
5	Organizational Excellence	18.40%	\$	44,157	25.00%	\$	11,039	50.00%	\$	22,079
6		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
7		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
8		0.00%	\$	•	0.00%	\$	-	0.00%	\$	
9		0.00%	\$	-	0.00%	\$	-	0.00%	\$	1
10		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
11		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
12		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
13		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
14		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
15		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
16		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
17		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
18		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
19		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
20		0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
	TOTAL	100.00%	\$	240,000		\$	67,028		\$	138,618

Blue text is entered once at the beginning of the project

Green text is updated ever quarter

Black text is automatically updated or static



#### **Project Objectives:**

The New Jersey Local Technical Assistance Program (LTAP) has a mission to become an information clearinghouse to foster a safe, efficient, environmentally sound transportation system by improving the skills and knowledge of the transportation industry through technology transfer activities, such as training, technical assistance and dissemination of resources.

The objectives of this project are to continue to diversify and expand the customer base, deliver quality customer service, communicate the program values to partners and clients, and enhance the technology transfer network, through the activities of the New Jersey Local Technical Assistance Program (LTAP).

#### Project Abstract:

The Center for Advanced Infrastructure and Transportation (CAIT), located at Rutgers University, is submitting this proposal for the continuation of the New Jersey Local Technical Assistance Program (NJ LTAP). NJ LTAP will conduct technology transfer activities that include the dissemination of information through a monthly newsletter, conducting training programs, and administering clearinghouse activities. This ongoing effort provides public works, engineering, planning, and law enforcement employees with training and information in the areas of design, maintenance, inspection, supervision, employee development, and other transportation related subjects. NJ LTAP will also support and provide services to the transportation research community in cooperation with the New Jersey Department of Transportation.

Recently, FHWA has revised the LTAP/TTAP focus areas and performance measures to better reflect a continuous cycle of improvement. Performance measures, formerly known as tasks, will be used in 2009 to assess safety, workforce development, infrastructure management, and organizational excellence. This approach will provide an opportunity to continually reassess the customer base and value in each focus area.

Center Name: New Jersey Local Technical Assistance Program
Reporting Period: April 1, 2009 to June 30, 2009

#### **Program Dashboard**

Total number of training sessions:	<u>39</u>
Total number of participants:	<u>1,936</u>
Total number of participant hours:	<u>9,913</u>
Total newsletter circulation:	<u>11,454</u>
Total number of LTAP/TTAP FTEs:	2.5

#### **Training Data**

#### Safety

The Safety metric is divided into 2 categories: Highway Safety and Worker/Workplace Safety. Count the training your center conducted or had responsibility for conducting, such as training cosponsored with a partner.

#### **Highway and Worker Safety**

Session Name	Session	Total # of		Tota	al # of part	icipants		Total # of	Total Participant	
Session name	Length [hours]	Sessions	Local	Tribal	State	Federal	Other	Participants	Hours	
Work Zone Safety Awareness										
Program	6	2			26		23	49	294	
Crash Data Records										
Technician										
Training	5	4	70					70	350	
Traffic Control										
Coordinator Program	32	2			25		15	40	1,280	
Traffic Control										
Coordinator Refresher										
Workshop	4	2					60	60	240	
Police Work Zone										
Safety Train the Trainer (MUTCD)	6	2	35					35	210	
Police Work Zone	6	2	32					32	192	

100 Brett Rd. Piscataway NJ 08854-8058



TOTAL	84	25	463	158	2	231	993	6,018
Teen Driver Education Forum	5	1	316	21		39	376	1,880
Work Zone Safety Leadership Conference	4	1		46	1	53	100	400
Work Zone Safety Week Workshops	4	4	72	40		40	152	698
Police Work Zone Safety Train the Refresher)	6	3	41				41	246
Police Work Zone Safety Train the Trainer (DOT Specs)	6	2	38				38	228
Safety Train the Trainer (NJ Vs. MUTCD)								

Infrastructure Management

Cossion Name	Session	Total # of		Tota	al # of parti	cipants		Total # of	Total
Session Name	Length [hours]	Sessions	Local	Tribal	State	Federal	Other	Participants	Participant Hours
Pipe Operations Safety	6	1	27					27	162
Bridge Connection Details and Design	4	1	6					6	24
The Mini Bridge: Intro to Culvert Planning and									
Design NJ Municipal	6	1	24					24	144
Stormwater Permit Changes	3.5	1	28					28	98
Pavement Maintenance: Crack Treatment									
Seminar	6	1	25					25	150
Roundabout Design	12	1	3				9	12	144
Electrical Signal Design	6	1	5				8	13	78
NJTPA Plan 2035	2	1			6		45	51	102
Traffic Signal Warrants at Intersections Near Railroad-Highway					_		9	9.5	400
Crossings New Jersey	2	1			5		60	65	130
Transit Signal Priority	2	1					48	48	96
TOTAL	47.5	9	118		5		125	289	1,128



# Workforce Development

Caralan Nama	Session	Total # of		Tota	ıl # of parti		Total # of	Total		
Session Name	Length [hours]	Sessions	Local	Tribal	State	Federal	Other	Participants	Participant Hours	
Preventing Sexual Harassment and Other Hostile Behaviors in the										
Workplace	4	1	28					28	112	
Construction Career Day	5	2					500	500	2,500	
American Recovery and Reinvestment Act of 2009	1	1			9		88	97	97	
NJDOT/PennDOT Smart Transportation Guidebook	2	1			1		28	29	58	
TOTAL	12	5	28		10		616	654	2,767	

# **Newsletter / Published Resources Data**

#### Circulation

Name of	Circulation							
Newsletter	Local	Tribal	State	Federal	Other			
LTAP E-News	1,961	7	920	161	764			

# Number of Articles per Focus Area

Newsletter Issue		Safety		Workforce	Infrastructure	
newsietter issue	Highway Worker V		Work Zone	Development	Management	
Volume 11,	1	1		4	1	
Number 04	1	1		4	1	
Volume 11	1			2	2	
Number 05	T			2	2	
Volume 11,	1	1	1	1	2	
Number 06	1	1	1	1	2	

#### **Materials Distribution Data**

		Safety		Workforce	Infrastructure Management	
Material Types	Highway	Worker	Work Zone	Development		
Publications	214		1,652	500	168	
CDs	376					
Videotapes						
DVDs						
Downloads						
Others [insert]						
TOTAL:						

#### **Technical Assistance Data**

Estimate the total percentage of time spent by your Center staff providing technical assistance during the past quarter: 40%

**Activities Related to Program Stakeholders** 

Organization			Α	ctivities		
	# of times center distributed information for this organization (mail, e-mail, fax, etc.)	# of joint training sessions	# of joint conferences	# of joint special programs	# of articles reprinted in LTAP/TTAP newsletters from this organization	# of center staff participating in national program efforts
		Nat	ional Stakehol	ders		
FHWA (HQ, Resource Center)	7				3	2
AASHTO					1	1
NACE	2				2	1
APWA	3				5	1
TRB						1
Salt Institute						1



		State	Local Stakeho	olders		_
FHWA Division						2
State DOT/govt	2	6				3
AASHTO Chapter						
NACE Chapter						1
APWA Chapter	3			1		1
ITE	4					2
<u>.</u>			Other Stakeholder	rs		
NJ Society of Municipal Engineers				1		2
NJ Div of Highway Traffic Safety	7		1		1	2
NJ Asphalt Pavement Assoc.	3					1
NJ WZS Partnership		10	1			2

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Ι.	<b>Progress</b>	this	guarter	bv	task.	with	specific	de	lıvera	bles:

- A. Safety Focus Area
- 25 Workshops
- 2,242 Resources Distributed
- B. Infrastructure Management Focus Area
- 9 Workshops

168 Resources Distributed

- C. Workforce Development Focus Area
- 5 Workshops

500 Resources Distributed

# D. Organizational Excellence

New Jersey Police Traffic Officers Association Meeting	April 1, 2009
American Public Works Association Education Summit	April 2-3, 2009
NLTAPA Executive Committee Meeting	April 7, 2009
Work Zone Safety Leadership Event	April 9, 2009
NLTAPA Safety Work Group Conference Call	April 13, 2009
APWA NJ Chapter Executive Board Meeting	April 15, 2009
NJ Association of County Engineers Meeting	April 17, 2009
Annual New Jersey Public Works Equipment Exposition Exhibit	April 21, 2009
Metropolitan Section, Institute of Transportation Engineers Mtg.	April 22, 2009
New Jersey Construction Career Day	April 23-24, 2009
NLTAPA Conference Committee Conference Call	April 30, 2009
Rutgers Univ. Transportation Coordinating Council Meeting	May 5, 2009
NLTAPA Safety Work Group Conference Call	May 11, 2009
APWA NJ Chapter Executive Board Meeting	May 13, 2009
Annual LTAP Region One Meeting	May 19-20, 2009
NLTAPA Conference Committee Conference Call	May 28, 2009
New Jersey Society of Municipal Engineers Meeting	June 3, 2009
NLTAPA Safety Work Group Conference Call	June 8, 2009
NLTAPA Executive Committee Meeting	June 15, 2009
APWA NJ Chapter Executive Board Meeting	June 17, 2009
NJ Society of Asphalt Technologists Meeting	June 17, 2009
New Jersey LTAP Stakeholder Meeting	June 19, 2009
Council of University Transportation Centers Summer Meeting	June 30-July 2, 2009

Course/Workshop Evaluations Ongoing
Technical Assistance Ongoing

# 2. Progress on Implementation and Training Activities:

All of the activities of this technology transfer project, and their implementation dates are included above.

Year 1 Budget	\$240,000
Total Project Budget	\$240,000
<b>Modified Contract Amount:</b>	\$
Total Project Expenditure to date	\$138,618
% of Total Project Budget Expended	57.76%

NJDOT Research Project Manager Concurrence:	Date:
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#### QUARTERLY PROGRESS REPORT

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RFP NUMBER	<b>:</b>	NJDOT RESEARCH PROJECT MANAGER:					
		W. Lad Szalaj					
TASK ORDER	NUMBER:	PRINCIPAL INVESTIGATOR:					
TO 230 / Acct 4	l-30761	Dr. Ali Maher					
Project Starting	Date: 01/01/2009	Period Covered: 2 <sup>nd</sup> Quarter 2009					
<b>Original</b> Project	et Ending Date: 12/31/2009						
<b>Modified Com</b>	pletion Date:						

Task % of Total		Fixed Budget		% of Task	C	ost this	% of Task to	Tot	al cost to
			J	this quarter	q	uarter	date		date
Mobilization		\$	-	0.00%	\$	-	0.00%	\$	-
Safety Focus Area	25.00%	\$	10,000	30.00%	\$	3,000	70.00%	\$	7,000
Infrastructure Management Focus Area	25.00%	\$	10,000	30.00%	\$	3,000	60.00%	\$	6,000
Workforce Development Focus Area	25.00%	\$	10,000	25.00%	\$	2,500	45.00%	\$	4,500
Organizational Excellence	25.00%	\$	10,000	25.00%	\$	2,500	50.00%	\$	5,000
	0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%			0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$		0.00%	\$	-	0.00%	\$	-
	0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
	0.00%	\$	-	0.00%	\$	-	0.00%	\$	-
	0.00%	\$	-	0.00%	\$		0.00%	\$	-
TOTAL	100.00%	\$	40,000		\$	11,000		\$	22,500

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#### **Project Objectives:**

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Total number of LTAP/TTAP FTEs:	<u>2.5</u>

#### **Training Data**

#### Safety

The Safety metric is divided into 2 categories: Highway Safety and Worker/Workplace Safety. Count the training your center conducted or had responsibility for conducting, such as training cosponsored with a partner.

#### **Highway and Worker Safety**

Session Name	Session	Session Length Total # of		Tota	al # of parti		Total # of	Total Participant		
Session name	[hours]	Sessions	Local	Tribal	State Federal Other		Other	Participants	Hours	
Work Zone Safety										
Awareness Program	6	2			26		23	49	294	
Crash Data										
Records Technician										
Training	5	4	70					70	350	
Traffic Control										
Coordinator Program	32	2			25		15	40	1,280	
Traffic Control	32				23		13	40	1,200	
Coordinator										
Refresher		0					00	00	0.40	
Workshop	4	2					60	60	240	
Police Work Zone Safety Train the										
Trainer (MUTCD)	6	2	35					35	210	
Police Work Zone										
Safety Train the	6	2	32					32	192	



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Trainer (NJ Vs. MUTCD)									
Police Work Zone									
Safety Train the									
Trainer (DOT									
Specs)	6	2	38					38	228
Police Work Zone									
Safety Train the									
Refresher)	6	3	41					41	246
Work Zone Safety									
Week Workshops	4	4	72		40		40	152	698
Work Zone Safety									
Leadership									
Conference	4	1			46	1	53	100	400
Teen Driver									
Education Forum	5	1	316		21		39	376	1,880
TOTAL	84	25	463		158	2	231	993	6,018

Infrastructure Management

Session Name	Session	Total # of		Tota	ıl # of parti	Total # of	Total Participant		
26221011 Mairie	Length [hours]	Sessions	Local	Tribal	State	Federal	Other	Participants	Hours
Pipe Operations Safety	6	1	27					27	162
Bridge Connection Details and Design	4	1	6					6	24
The Mini Bridge: Intro to Culvert Planning and									
Design	6	1	24					24	144
NJ Municipal Stormwater Permit Changes	3.5	1	28					28	98
Pavement Maintenance: Crack Treatment									
Seminar	6	1	25					25	150
Roundabout Design	12	1	3				9	12	144
Electrical Signal Design	6	1	5				8	13	78
NJTPA Plan 2035	2	1			6		45	51	102
Traffic Signal Warrants at Intersections Near Railroad-Highway Crossings	2	1			5		60	65	130
New Jersey Transit Signal Priority	2	1					48	48	96
TOTAL	47.5	9	118		5		125	289	1,128

### Workforce Development

Caralan Nama	Session Total # 0			Tota	ıl # of parti		Total # of	Total	
Session Name	Length [hours]	Sessions	Local	Tribal	State	Federal	Other	Participants	Participant Hours
Preventing Sexual Harassment and Other Hostile Behaviors in the									
Workplace	4	1	28					28	112
Construction Career Day	5	2					500	500	2,500
American Recovery and Reinvestment Act of 2009	1	1			9		88	97	97
NJDOT/PennDOT Smart Transportation Guidebook	2	1			1		28	29	58
TOTAL	12	5	28		10		616	654	2,767

# **Newsletter / Published Resources Data**

#### Circulation

Name of			Circulation		
Newsletter	Local	Tribal	State	Federal	Other
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# Number of Articles per Focus Area

Newsletter Issue		Safety	Workforce	Infrastructure		
newsietter issue	Highway Worker Work Zone		Development	Management		
Volume 11,	1	1		4	1	
Number 04	1	1		4	1	
Volume 11	1			2	2	
Number 05	1			2	2	
Volume 11,	1	1	1	1	2	
Number 06	1	1	1	1	2	

#### **Distribution Data**

Material Types		Safety	Workforce	Infrastructure	
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DVDs					
Downloads					
Others [insert]					
TOTAL:					

#### **Technical Assistance Data**

Estimate the total percentage of time spent by your Center staff providing technical assistance during the past quarter:

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**Activities Related to Program Stakeholders** 

Organization	Activities						
	# of times center distributed information for this organization (mail, e-mail, fax, etc.)	# of joint training sessions	# of joint conferences	# of joint special programs	# of articles reprinted in LTAP/TTAP newsletters from this organization	# of center staff participating in national program efforts	
National Stakeholders							
FHWA (HQ, Resource Center)	7				3	2	
AASHTO					1	1	
NACE	2				2	1	
APWA	3				5	1	
TRB						1	
Salt Institute						1	



State/Local Stakeholders							
FHWA Division						2	
State DOT/govt	2	6				3	
AASHTO Chapter							
NACE Chapter						1	
APWA Chapter	3			1		1	
ITE	4					2	
			Other Stakehold	ers			
NJ Society of Municipal Engineers				1		2	
NJ Div of Highway Traffic Safety	7		1		1	2	
NJ Asphalt Pavement Assoc.	3					1	
NJ WZS Partnership		10	1			2	

1	<b>Progress</b>	thic	quarter	hv	tack	with	enecific	de	livera	hlee.
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- A. Safety Focus Area
- 25 Workshops
- 2,242 Resources Distributed
- B. Infrastructure Management Focus Area
- 9 Workshops

168 Resources Distributed

- C. Workforce Development Focus Area
- 5 Workshops

500 Resources Distributed

# D. Organizational Excellence

New Jersey Police Traffic Officers Association Meeting American Public Works Association Education Summit NLTAPA Executive Committee Meeting Work Zone Safety Leadership Event NLTAPA Safety Work Group Conference Call APWA NJ Chapter Executive Board Meeting NJ Association of County Engineers Meeting Annual New Jersey Public Works Equipment Exposition Exhibit Metropolitan Section, Institute of Transportation Engineers Mtg. New Jersey Construction Career Day NLTAPA Conference Committee Conference Call Rutgers Univ. Transportation Coordinating Council Meeting NLTAPA Safety Work Group Conference Call APWA NJ Chapter Executive Board Meeting Annual LTAP Region One Meeting NLTAPA Conference Committee Conference Call New Jersey Society of Municipal Engineers Meeting NLTAPA Safety Work Group Conference Call NLTAPA Executive Committee Meeting APWA NJ Chapter Executive Board Meeting NJ Society of Asphalt Technologists Meeting	April 1, 2009 April 2-3, 2009 April 7, 2009 April 9, 2009 April 13, 2009 April 15, 2009 April 17, 2009 April 21, 2009 April 22, 2009 April 23-24, 2009 April 30, 2009 May 5, 2009 May 11, 2009 May 13, 2009 May 19-20, 2009 May 28, 2009 June 3, 2009 June 3, 2009 June 15, 2009 June 17, 2009 June 17, 2009
NJ Society of Asphalt Technologists Meeting	June 17, 2009
New Jersey LTAP Stakeholder Meeting Council of University Transportation Centers Summer Meeting	June 19, 2009 June 30-July 2, 2009

Course/Workshop Evaluations Ongoing Technical Assistance Ongoing

# 2. Progress on Implementation and Training Activities:

All of the activities of this technology transfer project, and their implementation dates are included above.

Year 1 Budget	\$40,000
Total Project Budget	\$40,000
<b>Modified Contract Amount:</b>	\$
Total Project Expenditure to date	\$22,500.00
% of Total Project Budget Expended	56.25%

NJDOT Research Project Manager Concur	ence:	Date:
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